

Amendments to the Claims

1. ***(Cancelled)*** An electric insulating material comprising a glass fiber layer and a mica layer disposed thereon, wherein the glass fiber layer comprises twist-free glass yarn.
2. ***(Cancelled)*** An electric insulating material according to claim 1, wherein the glass fiber layer is a woven glass fabric.
3. ***(Cancelled)*** An electric insulating material according to claim 1, additionally comprising at least one polymeric resin.
4. ***(Cancelled)*** An electric insulating material according to claim 3, wherein the polymeric resin comprises a thermosetting resin.
5. ***(Cancelled)*** An electric insulating material according to claim 3, wherein the polymeric resin comprises at least one epoxy resin.
6. ***(Cancelled)*** An electric insulating material according to claim 3, wherein the polymeric resin comprises at least one silicone resin.
7. ***(Cancelled)*** An electric insulating material according to claim 3, wherein the polymeric resin content ranges from about 3% to about 25% by weight.
8. ***(Cancelled)*** An electric insulating material according to claim 3, wherein the polymeric resin content ranges from about 5% to about 18% by weight.
9. ***(Cancelled)*** An electric insulating material according to claim 3, additionally comprising a cure accelerator.
10. ***(Cancelled)*** An electric insulating material according to claim 9, wherein the cure accelerator comprises a metal or an amine.
11. ***(Cancelled)*** An electric insulating material according to claim 3, wherein the polymeric resin content ranges from about 25% to about 50% by weight.

12. **(Cancelled)** An electric insulating material according to claim 3, wherein the polymeric resin content ranges from about 27% to about 45% by weight.
13. **(Cancelled)** An electric insulating material according to claim 1, in the form of a tape.
14. **(Withdrawn)** A process for manufacturing an insulated electrical conductor, said method comprising wrapping the electrical conductor with an electric insulating material according to any of the above claims.
15. **(Withdrawn)** A process according to claim 14, additionally comprising heating the wrapped conductor to cure the resin.
16. **(Withdrawn)** A process according to claim 14, wherein the electrical conductor is a wire suitable for use in high temperature environments.
17. **(Withdrawn)** A process according to claim 14, wherein the electrical conductor is a coil for use in a high voltage electrical motor.
18. **(Withdrawn)** A process according to claim 14, additionally comprising impregnating the material with a thermosetting resin before heating the wrapped conductor.
19. **(Cancelled)** A high temperature insulated wire manufactured by:

wrapping an electrical conductor suitable for high temperature environments with an electric insulating material comprising a glass fiber layer comprising a twist-free glass yarn and a mica layer disposed thereon;
wherein said wire is rated for operation at temperatures up to 450°C.
20. **(Cancelled)** A high temperature insulated wire comprising a wire suitable for high temperature environments wrapped with a tape comprising a glass fiber layer comprising a twist-free glass yarn and a mica layer disposed thereon, wherein said high temperature wire is rated for operation at temperatures up to 1100°C.

21. **(Cancelled)** A high temperature insulated coil manufactured by:
wrapping an electrical conductor with an electric insulating material comprising a glass fiber layer comprising a twist-free glass yarn and a mica layer disposed thereon,
22. **(Cancelled)** An electric insulating material according to claim 1, wherein the twist-free glass yarn comprises zero-twist glass yarn.
23. **(Cancelled)** An electric insulating material according to claim 1, wherein the material comprises a greater mica content for a given material thickness compared to a material comprising a non-twist free glass yarn having about the same material thickness.
24. **(Cancelled)** An electric insulating material according to claim 1, wherein the material comprises a greater mica-to-glass ratio for a given material thickness compared to a material comprising a non-twist free glass yarn having about the same material thickness.
25. **(Cancelled)** An electric insulating material according to claim 3, wherein the material comprises a lower total polymeric resin content compared to a material comprising a non-twist free glass yarn.
26. **(Cancelled)** An electric insulating material according to claim 1, wherein the material comprises a lower dissipation factor (DF) compared to a material comprising a non-twist free glass yarn.
27. **(Cancelled)** An electric insulating material according to claim 1, wherein the material comprises a lower dissipation factor (DF) at 160 degrees C at a given mica weight compared to a material comprising a non-twist free glass yarn having about the same mica weight.
28. **(Cancelled)** An electric insulating material comprising a glass fiber layer, a mica layer disposed thereon, and at least one polymeric resin, wherein the glass fiber layer comprises twist-free glass yarn obtained by the following process steps:

(a) providing a fiberglass forming package with a single fiberglass strand wound on the package and having a longitudinal axis;

(b) supporting the package in a manner that permits rotation of the package about the longitudinal axis;

(c) pulling the single strand from the package along the longitudinal axis and simultaneously rotating the package about the longitudinal axis while maintaining a rotational surface speed of the package equal to a linear speed of pulling the single strand and in a direction of rotation such that the fiberglass strand is pulled off the package with a net zero amount of twist; and

(d) wrapping the single strand which is pulled from the package onto a beam which can be used to form a warp beam.

29. (New) An electric insulating material comprising a glass fiber layer and a mica layer disposed thereon, and at least one polymeric resin, wherein the glass fiber layer comprises twist-free glass yarn, and

wherein said insulating material has superior tensile strength, an increase in thermoconductivity and a reduced dissipation factor.

30. (New) An electric insulating material according to claim 29, wherein the thickness of the glass fiber layer most preferably ranges from about 0.025 mm to about 0.076 mm.

31. (New) An electric insulating material according to claim 30, wherein the thickness of the mica layer most preferably ranges from about 0.02 mm to about 0.13 mm.

32. (New) An electric insulating material according to claim 29, wherein the polymeric resin comprises a thermosetting resin.

33. (New) An electric insulating material according to claim 29, wherein the polymeric resin comprises at least one epoxy resin.

34. **(New)** An electric insulating material according to claim 31, wherein the polymeric resin comprises at least one silicone resin.
35. **(New)** An electric insulating material according to claim 29, wherein the polymeric resin content for a VIP process ranges from about 3% to about 25% by weight.
36. **(New)** An electric insulating material according to claim 29, wherein the polymeric resin content for a VIP process ranges from about 5% to about 18% by weight.
37. **(New)** An electric insulating material according to claim 29, additionally comprising a cure accelerator.
38. **(New)** An electric insulating material according to claim 36, wherein the cure accelerator comprises a metal or an amine.
39. **(New)** An electric insulating material according to claim 29, wherein the polymeric resin content for a resin rich process ranges from about 25% to about 50% by weight.
40. **(New)** An electric insulating material according to claim 29, wherein the polymeric resin content for a resin rich process ranges from about 27% to about 45% by weight.
41. **(New)** An electric insulating material according to claim 29, in the form of a tape.
42. **(New)** An electric insulating material according to claim 29, wherein the twist-free glass yarn comprises woven warp and weft threads with zero twist.
43. **(New)** An electric insulating material according to claim 29, wherein the insulating material comprises an increased mica to glass thickness ratio for a given material thickness.
44. **(New)** A high temperature insulated wire manufactured by wrapping an electrical conductor suitable for high temperature environments with an electric insulating material comprising a glass fiber layer comprised of twist-free glass yarn, a mica layer disposed thereon, and at least one polymeric resin; wherein said wire is rated for operation at temperatures up to 450°C.

45. (New) A high temperature insulated wire comprising a wire suitable for high temperature environments wrapped with a tape comprising a glass fiber layer comprised of twist-free glass yarn, a mica layer disposed thereon, and at least one polymeric resin, wherein said high temperature wire is rated for operation at temperatures up to 1100°C.

46. (New) A high temperature insulated coil manufactured by wrapping an electrical conductor with an electric insulating material comprising a glass fiber layer comprising a twist-free glass yarn and a mica layer disposed thereon, and at least one polymeric resin.